

ABSTRACT OF THE DISCLOSURE

A feature extraction unit (102) generates a feature image of an original image using an image of a first region in the original image which is formed of the first region and a second region. An encryption unit (103) generates watermark information which contains the feature image and information associated with the original image. An error-correction encoding unit 104 makes error-correction encoding of the watermark information to generate error-correction encoded watermark information. A substitution unit (106) outputs, as an output image, an image formed by replacing image information of the second region in the original image by the error-correction encoded watermark information.